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We Claim:

1. An isolated antibody, or an antigen-binding portion thereof, that specifically
5 binds human IL-1 β , wherein said antibody is comprised of a light chain and a heavy chain and wherein:

(a) said light chain is comprised of a light chain CDR1 selected from the group consisting of SEQ ID NOS: 1, 12, 22, 29, 31, 33, 37, or 39; a light chain CDR2 of SEQ ID NO:2; and, a light chain CDR3 selected from the group consisting of SEQ ID NOS:
10 3,7, 13, 15, 17, 20, 25, 34, or 41;

(b) said heavy chain is comprised of a heavy chain CDR1 selected from the group consisting of SEQ ID NOS: 4 or 10; a heavy chain CDR2 sequence selected from the group consisting of SEQ ID NOS: 5, 8, 16, 18, 21, 23, or 28; and a heavy chain CDR3 selected from the group consisting of SEQ ID NOS: 6, 9, 11, 14, 19, 24, 26, 27, 30, 32,
15 35, 36, 38, 40, or 42; and,

(c) provided that said antibody does not consist of a light chain CDR1 of SEQ ID NO:1, a light chain CDR2 of SEQ ID NO:2, a light chain CDR3 of SEQ ID NO:3, a heavy chain CDR1 of SEQ ID NO:4, a heavy chain CDR2 of SEQ ID NO:5, and a heavy chain CDR3 of SEQ ID NO:6.

2. The isolated antibody, or antigen-binding portion thereof, of Claim 1 which is a humanized antibody.

3. An isolated antibody, or antigen-binding portion thereof, wherein said antibody
25 comprises:

- a) a light chain CDR1 comprising the amino acid sequence of SEQ ID NO: 39;
- b) a light chain CDR2 comprising the amino acid sequence of SEQ ID NO: 2;
- c) a light chain CDR3 comprising the amino acid sequence of SEQ ID NO: 41;
- d) a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO: 10;
- 30 e) a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO: 21;
- and,
- f) a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO: 38.

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4. The antibody of Claim 3 wherein said antibody comprises a heavy chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 56 and a light chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 61.

5. The antibody of Claim 3 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 47 and a light chain encoded by the amino acid sequence as shown in SEQ ID NO: 48.

6. The antibody of Claim 3 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 68 and a light chain encoded by the amino acid sequence as shown in SEQ ID NO: 48.

7. An isolated antibody, or antigen-binding portion thereof, wherein said antibody comprises:

- a) a light chain CDR1 comprising the amino acid sequence of SEQ ID NO: 37;
- b) a light chain CDR2 comprising the amino acid sequence of SEQ ID NO: 2;
- c) a light chain CDR3 comprising the amino acid sequence of SEQ ID NO: 15;
- d) a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO: 10;
- e) a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO: 21;
- and,
- f) a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO: 35.

8. The antibody of Claim 7 wherein said antibody comprises a heavy chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 55 and a light chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 60.

9. The antibody of Claim 7 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 45 and a light chain encoded by the amino acid sequence as shown in SEQ ID NO: 46.

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10. An isolated antibody, or antigen-binding portion thereof, wherein said antibody comprises:

- 5 a) a light chain CDR1 comprising the amino acid sequence of SEQ ID NO: 39;
- b) a light chain CDR2 comprising the amino acid sequence of SEQ ID NO: 2;
- c) a light chain CDR3 comprising the amino acid sequence of SEQ ID NO: 17;
- d) a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO: 10;
- e) a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO: 16;
- 10 and,
- f) a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO: 36.

11. The antibody of Claim 10 wherein said antibody comprises a heavy chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 57 and
15 a light chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 62.

12. The antibody of Claim 10 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 49 and a light chain
20 encoded by the amino acid sequence as shown in SEQ ID NO: 50.

13. An isolated antibody, or antigen-binding portion thereof, wherein said antibody comprises:

- 25 a) a light chain CDR1 comprising the amino acid sequence of SEQ ID NO: 39;
- b) a light chain CDR2 comprising the amino acid sequence of SEQ ID NO: 2;
- c) a light chain CDR3 comprising the amino acid sequence of SEQ ID NO: 17;
- d) a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO: 10;
- e) a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO: 21;
- and,
- 30 f) a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO: 35.

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14. The antibody of Claim 13 wherein said antibody comprises a heavy chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 59 and a light chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 63.

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15. The antibody of Claim 13 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 51 and a light chain encoded by the amino acid sequence as shown in SEQ ID NO: 52.

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16. An isolated antibody, or antigen-binding portion thereof, wherein said antibody comprises:

- a) a light chain CDR1 comprising the amino acid sequence of SEQ ID NO: 29;
- b) a light chain CDR2 comprising the amino acid sequence of SEQ ID NO: 2;
- c) a light chain CDR3 comprising the amino acid sequence of SEQ ID NO: 17;
- d) a heavy chain CDR1 comprising the amino acid sequence of SEQ ID NO: 10;
- e) a heavy chain CDR2 comprising the amino acid sequence of SEQ ID NO: 21;
- and,
- f) a heavy chain CDR3 comprising the amino acid sequence of SEQ ID NO: 30.

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17. The antibody of Claim 16 wherein said antibody comprises a heavy chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 58 and a light chain variable region encoded by the polynucleotide sequence as shown in SEQ ID NO: 64.

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18. The antibody of Claim 16 wherein said antibody comprises a heavy chain encoded by the amino acid sequence as shown in SEQ ID NO: 53 and a light chain encoded by the amino acid sequence as shown in SEQ ID NO: 54.

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19. The isolated antibody, or antigen-binding portion thereof, of any of Claims 1 to 18, wherein said antibody has an IgG isotype.

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20. The isolated antibody, or antigen-binding portion thereof, of Claim 19, wherein the isotype is selected from the group consisting of heavy chain constant regions IgG1 and IgG4.

5 21. The isolated antibody, or antigen-binding portion thereof, of Claim 20, wherein the isotype is IgG1 encoded by the polynucleotide as shown in SEQ ID NO: 65.

22. The isolated antibody, or antigen-binding portion thereof, of Claim 20, wherein the isotype is IgG4 encoded by the polynucleotide as shown in SEQ ID NO: 66.
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23. The isolated antibody, or antigen-binding portion thereof, of any of Claims 1 to 18, wherein said antibody has a light chain kappa chain constant region encoded by the polynucleotide as shown in SEQ ID NO: 67.

15 24. An isolated nucleic acid, comprising a polynucleotide encoding the light chain or the heavy chain of an antibody of any one of Claims 1 through 23.

25. An expression vector comprising a nucleic acid according to Claim 24.

20 26. A host cell stably transfected with the expression vector of Claim 25 wherein the host cell expresses a protein of any one of Claims 1 through 23.

27. The host cell of Claim 26 wherein the host cell is selected from the group consisting of a Chinese Hamster Ovary cell, SP2/0 myeloma cell, NS0 myeloma cell, a
25 Syrian hamster ovary cell, and an embryonic kidney cell.

28. The host cell of Claim 27 that is a NS0 myeloma cell.

29. A pharmaceutical composition comprising the antibody of any one of Claims 1
30 through 23.

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30. A method of treating rheumatoid arthritis or osteoarthritis, comprising administering to a subject an effective amount of the antibody of any one of Claims 1 through 23.

5 31. A method of inhibiting the destruction of cartilage, comprising administering to a subject in need thereof an effective amount of the antibody of any one of Claims 1 through 23.

10 32. The use of the antibody of any one of Claims 1 through 23 for the manufacture of a medicament to treat a subject with rheumatoid arthritis or osteoarthritis.

 33. The use of the antibody of any one of Claims 1 through 23 for the manufacture of a medicament to inhibit cartilage destruction in a subject in need thereof.

15 34. A method of treating neuroinflammation associated with stroke or ischemic, excitotoxic, or traumatic head injury comprising administering to a subject an effective amount of the antibody of any one of Claims 1 through 23.

20 35. The use of the antibody of any one of Claims 1 through 23 for the manufacture of a medicament to treat a subject with neuroinflammation associated with stroke or ischemic, excitotoxic, or traumatic head injury.